MAD-5274 Mobile Development and Design Capstone Project (ii)

Computer Studies

Course Number:	**Co-Requisites:**	**Pre-Requisites:**
MAD-5274	N/A	MAD-5264
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Approved by:	Chris Slade, Dean School of Business and International Ed.	
Approval Date:	Friday, May 1, 2020	
Approved for Academic Year:	2020-2021	
Normative Hours:	60.00	

Course Description

This course is the culmination of the all material learned in the program. In this project-based course, students design, develop, and publish an app that showcases the knowledge and skills gained throughout the program. All students must produce a ready-to-publish mobile application in a platform of their choice such as iOS, Android or cross platform.

Course Learning Outcomes/Course Objectives

1. Propose your mobile app idea in a presentation format taking into consideration scope, category of the app, monetization, length of the project, resources, and competitive analysis.

    1.1   Present an idea for a mobile app

    1.2   Plan the development of the mobile application

    1.3   Perform competitive analysis for proposed mobile application

    1.4   Select and justify the chosen monetization technique

2. Identify the requirements and use cases of the proposed mobile application.

    2.1   Identify functional requirements of the proposed mobile application

    2.2   Identify any non-functional requirements of the proposed mobile application

    2.3   Describe use cases of the proposed mobile application

3. Analyze and design the proposed mobile application based on identified use cases and requirements.

    3.1   Analyze all use cases and identify the required components and flow of data

    3.2   Analyze both functional and non-functional requirements of the proposed mobile application

3.3   Design all necessary components of the mobile application

3.4   Using wireframing to outline the basic structure of your application

4. **Integrate ideas and collaborate with team members to complete assigned tasks.**

    4.1   Perform and document daily agile team meetings

    4.2   Effectively communicate with team members and other stakeholders of the project

    4.3   Propose and discuss ideas to help complete tasks

5. **Implement the proposed mobile application for the proposed platform using the agile software development methodology.**

    5.1   Perform daily sprints on scheduled tasks

    5.2   Perform a check, commit, push and pull of the source code on GitHub

    5.3   Complete tasks in time according to the project plan

6. **Design and implement and execute test cases for the proposed mobile application to make sure it satisfies all requirements.**

    6.1   Identify all test cases for the proposed mobile application

    6.2   Design the test cases with detailed outcomes

    6.3   Implement the identified test cases

    6.4   Execute the identified test cases

Relationship to Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

EES 1.1	Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience. (T, A, CP,)
EES 1.2	Respond to written, spoken or visual messages in a manner that ensures effective communication. (T, A, CP,)
EES 4.6	Locate, select, organize and document information using appropriate technology and information systems. (T, A, CP,)
EES 4.7	Analyze, evaluate and apply relevant information from a variety of sources. (T, A, CP,)
EES 5.8	Show respect for diverse opinions, values, belief systems and contributions of others. (T, A, CP,)
EES 5.9	Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals. (T, A, CP,)
EES 6.10	Manage the use of time and other resources to complete projects. (T, A, CP,)
EES 6.11	Take responsibility for one's own actions, decisions and consequences. (T, A, CP,)

Relationship to Vocational Learning Outcomes

This course provides the opportunity for you to achieve the following Program Vocational Learning Outcomes (VLO) which will be taught and evaluated at an taught (T), assessed (A) or culminating peformance (CP) level:

MADT - Mobile Application Design and Development

VLO 1	Evaluate business and design requirements to select, formulate and implement mobile solutions. (T, A, CP)
VLO 2	Propose deliverable proprietary mobile solutions to prospective clients using business, marketing and sales strategies. (T, A, CP)
VLO 6	Design, develop and publish device-specific mobile applications using mobile solution technology to meet stakeholder requirements. (T, A, CP)
VLO 7	Evaluate and implement new features for current IOS, Android and other platforms to meet client needs. (T, A, CP)
VLO 8	Select and integrate database and server-side technologies into mobile solutions. (T, A, CP)
VLO 9	Construct and test security of mobile solutions using appropriate network technologies to secure against system threats. (T, A, CP)
VLO 10	Use project management principles and industry protocols to manage a collaborative mobile application development and to ensure quality assurance. (T, A, CP)
VLO 11	Design, develop and build a database to application specifications (T, A, CP)

Learning Resources

There are no resources required for this course.

Student Evaluation

1. Project planning presentation [20%]
2. Milestone 1 - [20%]
3. Milestone 2 [20%]
4. Final Capstone presentation and demonstration [40%]

Grade Scheme

The round off mathematical principle will be used. Percentages are converted to letter grades and grade points as follows:

Mark (%)	Grade	Grade Point	Mark (%)	Grade	Grade Point
94-100	A+	4.0	67-69	C+	2.3
87-93	A	3.7	63-66	C	2.0
80-86	A-	3.5	60-62	C-	1.7
77-79	B+	3.2	50-59	D	1.0
73-76	B	3.0	0-49	F	0.0
70-72	B-	2.7			

Prior Learning Assessment and Recognition

Students who wish to apply for prior learning assessment and recognition (PLAR) need to demonstrate competency at a post-secondary level in all of the course learning requirements outlined above. Evidence of

learning achievement for PLAR candidates includes:

- Portfolio
- Project/Assignment

Course Related Information

In this course, students work as a team under the guidance of a Capstone faculty advisor with whom they will formally meet with to discuss course components; the capstone proposal as well as analysis, design and implementation of the mobile application. Several milestone presentations are required by the team to demonstrate the progress of the Capstone.

College Related Information

Academic Integrity

Lambton College is committed to high ethical standards in all academic activities within the College, including research, reporting and learning assessment (e.g. tests, lab reports, essays).
The cornerstone of academic integrity and professional reputation is principled conduct. All scholastic and academic activity must be free of all forms of academic dishonesty, including copying, plagiarism and cheating.

Lambton College will not tolerate any academic dishonesty, a position reflected in Lambton College policies. Students should be familiar with the Students Rights and Responsibilities Policy, located at lambtoncollege.ca. The policy states details concerning academic dishonesty and the penalties for dishonesty and unethical conduct.

Questions regarding this policy, or requests for additional clarification, should be directed to the Lambton College Student Success Department.

Students with Disabilities

If you are a student with a disability please identify your needs to the professor and/or the Accessibility Centre so that support services can be arranged for you. You can do this by making an appointment at the Accessibility Centre or by arranging a personal interview with the professor to discuss your needs.

Student Rights and Responsibility Policy

Acceptable behaviour in class is established by the instructor and is expected of all students. Any form of misbehaviour, harassment or violence will not be tolerated. Action will be taken as outlined in Lambton College policy.

Date of Withdrawal without Academic Penalty

Please consult the Academic Regulations and Registrar's published dates.

Waiver of Responsibility

Every attempt has been made to ensure the accuracy of this information as of the date of publication. The content may be modified, without notice, as deemed appropriate by the College.

Students should note policies may differ depending on the location of course offering. Please refer to campus location specific policies:
LAMBTON COLLEGE POLICIES – applicable to all Lambton College students.

- Student Rights & Responsibilities & Discipline policy (2000-5-1)
- Test & Exam Writing Protocol (2000-1-6)
- Evaluation of Students (2000-1-3)

- (https://www.lambtoncollege.ca/custom/Pages/Policies/Policies.aspx)

CESTAR COLLEGE:

- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Toronto/Student_Policies/

QUEENS COLLEGE:

- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Mississauga/Student_Policies/

Note: It is the student's responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.